

AMEETUFF TECHNICAL SPECIFICATION OF Ameetuff (Tm) st coat

Ameetuff St coat -- FIRE PROTECTION OF STRUCTURAL /SHEET STEEL WORK BY Ameetuff St
In tumescent fire retardant coating for steel structure.

Fire proofing with In tumescent fire retardant coating is the most modern & internationally accepted method for protection of Steel Structures, vessels against the damaging effect of fire.

Current architectural concepts for high rise buildings rely more on Rafter type construction avoiding concrete beams resulting in space saving and greater economy.

In the event of fire the decorative Ameetuff st coat quickly encloses the steel in reliable foam ,which slows down the temperature rise in steel and protects the construction against premature collapse up to two hours. This coating is also water proof, and recommended even for steel sheet roof ,and also for boats ,ships etc

WHY FIRE PROOFING OF STEEL?

WINNING TIME IS CRITICAL

Steel loses its structural strength upon heating. As soon as the Steel temperature approaches 550°C (900° F) it loses 65% of its yield strength and may lead to its collapse. In the event of fire winning time is crucial to evacuating people and limiting the amount of structural damage. Thus it is necessary to protect Steel structures from fire.

Studies in Europe and U.S.A over the last two decades have conclusively proven the fact that in tumescent Paints have definite advantages over the conventional methods of Steel Fire Proofing. The most important of all the considerations is a very high degree of corrosion resistance properties which, due to passage of time cause immense problems with Concrete/Cementations Coatings

FUNCTION OF INTUMESCENT COATINGS

In the event of fire, the in tumescent coating produces a residue which is puffed by escaping gases. It Produces tough insulating foam which will protect material over which it is formed. Such type of coating is called an in tumescent coating..

FIRE PROTECTION OF STEEL WITH Ameetuff St

Ameetuff St is a smooth, thin, easy to apply coating, which replaces the traditional labour intensive Cladding and encasement method. AmeetuffSt is an Intumescent (it swells when heated) Ameetuff St that protects structural steel work from fire.

The ability of Ameetuff St to retard the rate of heat transfer results from the chemical characteristics Of its constitue.

Ameetuff St. At a temperature of more than 250° C,they undergo a series of reactions that create an expanded low density foam structure, with excellent heat insulating properties. This low conductivity forms a barrier between the fire and steel surface, which substantially decreases the temperature rise of the metal, effectively protecting it during the severest of fire.

SYSTEM OFFERED

The Fire protection to Steel with solvent based , base and top coat and water based high intumescent mid coat in multi layer system as stuffing in sandwich .Ameetuff St consists of the application of:

FOR FIRE RETARDENT COATING SYASTEM FROM 550 -750° C FOR TWO HOUR RATING

PRIMER -(BASE COAT)—ONE COAT

MID COAT - THREE TO FOUR COATS (in regular 4 hour interval)

TOP COAT --TWO COATS (in regular 4 hour interval immediately after mid coat)

1. BASE COAT -PRIMER COATING USING STEEL BAR/ sheets with Ameetuff St primer

Ameetuff St primer is a non-flammable (when dry) anti-corrosive Ameetuff St primer which provides a very high degree of corrosion resistance to the substrate. For steel work, which is already primed, only one coat is required.

Coverage of the Primer is 4-6 SQM / per kg / Coat.

2. Ameetuff St -Mid coat

Ameetuff St mid coat is applied in multiple coats at four hour intervals. Depend on the fire time resistance, more time resistance, means more coats requirement, normally two coat solve fire resistance purpose. This coating is water based hence immediately after four hours OF FINAL COAT ,top coat application is must , for water and rust protection .

3. Ameetuff St Top Coat

Ameetuff St Top coat need to apply immediately after four hours of final mid coat layer , two coats of top coat is essential ,at 4 hour intervals.

This top coating is fire resistant ,Corrosion Resistant, totally Water & mild Acid/Alkali Resistant with excellent adhesion properties to the mid coat , steel and Aluminium surface.

This coat of Ameetuff St has a moderate flexibility, thus preventing the formation of cracks due to the thermal expansion of steel work. No lathing or reinforcement is required due to low thickness of coating.

4. CLEAR FIRE RETARDENT TOP COAT

Use CLEAR FIRE RETARDENT top coat for structural /sheets steel work exposed to weathering or for use in enclosed

compartment with wet or humid ambient conditions.

TECHNICAL DATA SHEET FOR Ameetuff St top coat & Ameetuff St primer

Ameetuff St top coat Ameetuff St primer Colour off White / Dark Admiral Grey, green, brown ,Pink, rust ,etc FINISH Textured Matt Smooth & uniform

DRYING TIME FOR Touch dry -

1 hours -2 Hours

COATING INTERVAL -

4 HOUR TO SIX HOURS DEPEND UPON WETHER CONDITIONS

EACH COAT Hard dry -72 hours 24 Hours

FLASH POINT Above 28 ° C. Above 28 ° C

SOLID CONTENTS 56% approx. 62% approx.

SCRATCH HARDNESS Conforms to IS:101 Conforms to IS:101

SPECIFIC GRAVITY 1.10 +/-0.05 1.25 +/-0.05

RESISTANCE TO LUBRICATING OIL Conforms to IS:101 Conforms to IS:101

PROTECTION FROM CORROSION UNDER CONDITIONS OF CONDENSATION Conforms to IS:101
Conforms to IS:101

INTUMESCENCE App. 20 Times (approx)

TOXICITY semi -toxic semi-toxic

SHELF LIFE One year at room temperature when stored indoors in sealed Containers. One year at room temp. when stored indoors in Sealed containers.

PACKING SIZE : Drums 25 Kgs. M. S. Drums 25 Kgs. M. S

METHOD OF APPLICATION By brush / trowel/spray By brush / trowel/spray

FIRE RESISTANCE ---

Although thickness of the coating to achieve the desired fire resistance depends upon the thickness, Generally the following dry coating thickness is adequate to achieve the desired fire rating for steel

Structures Steel --:

30 minutes rating @ approx. 500 gram/ per Sq. m. (total material required include base coat + mid coat + Top coat)

60 minutes rating @ approx. 1000 gram ./ per Sq. mt.

120 minute rating @ approx 1500 gram /per sq .mt

We calculate material requirement i.e how much base coat , mid coat and top coat required , depend upon structure / sheet thickness and area of application and fire retardant rating required .

SAFETY

Ameetuff St presents no known health hazards during or after application. However, it is recommended that ventilation may be required during application since it is solvent based and water based high polymer coating . No Inflammable activity should be carried out when application is under process./ for solvent base exterior F.R coating

APPLICATION PROCESS -

Stir the base thoroughly to uniform consistency. Let the mixture mature equally mixed. Stir it again before and during application.

Brush / Roller : Apply without thinning.
Depending on conditions.

Conventional Spray:

Use any standard equipment at an atomising pressure of 3.5 - 4.2 kg/cm².

Low Pressure Spray : Preferable apply without thinning. Use any standard equipment at an atomising pressure of 3.5 - 4.2 kg/cm²

Tip Size : 0.33 - 0.38 mm, Tip Pressure - 110 - 140 Kg/cm²

1. Clean the surface of rust, grease, dust etc. ,

2. Apply one coat of Ameeuff St base coat anti-corrosive fire retardant primer on clean dry surface..

3. Apply multiple coat of Ameeuff St mid coat in 4 hour interval by brush./spray Allow it to dry for approximately

4-6 hours (hard dry).

4. Apply the two layer of Ameeuff st fire retardant Top coat .

Ameeuff St required consumption of coating can be achieved in 5-7 coats. Depend upon application method

NOTE --

1. Ameeuff thinner for cleaning brush/equipment .The Coating should be used within the stipulated pot life period.

2. Don't apply when temperature falls below -10°C or rises above 60°C and when relative humidity rises above 80%. Do not apply during rain, fog or mist.

3. To avoid any undue damage to the coating and Spray equipments clean them with thinner.
4. No Inflammable activity should be carried out when application is under process./ for solvent base exterior F.R coating

Disclaimer--The information contained within this web page is based on information believed to be reliable at the time of preparation. The Company will not be liable for loss or damage howsoever caused including liability of negligence which may be incurred by the user of the data contained herein. It is the user's responsibility to conduct all necessary tests to confirm the suitability of any product or system for their intended use. No guarantee of results is implied since conditions of use are beyond our control.